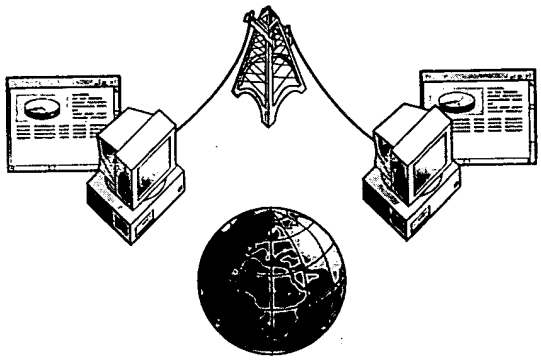
L Number	Hits	Search Text	DB	Time stamp
-	975	data with dictionary with (defin$3 or edit$3 or defin$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/24 10:34
-	51	(data with dictionary with (defin$3 or edit$3 or defin$3)) with rule	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/24 10:26
-	26	5450545.URPN.	USPAT	2003/10/24 10:29
-	258	data adj1 dictionary with (defin$3 or edit$3 or defin$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/24 10:38
-	16	(data adj1 dictionary with (defin$3 or edit$3 or defin$3)) with rul$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/24 10:34
-	26	data adj1 dictionary with (defin$3 or edit$3 or defin$3 or creat$3) with display	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/24 10:38

D

data compression *n.* A means of reducing the amount of space or bandwidth needed to store or transmit a block of data, used in data communications, facsimile transmission, file storage and transfer, and CD-ROM publishing. *Also called:* data compaction.

data conferencing *n.* Simultaneous data communication among geographically separated participants in a meeting. Data conferencing involves whiteboards and other software that enable a single set of files at one location to be accessed and modified by all participants. See the illustration. *See also* desktop conferencing, whiteboard. *Compare* video conferencing.



Data conferencing.

data control *n.* The aspect of data management concerned with tracking how and by whom data is used, accessed, altered, owned, and reported on.

data conversion *n.* Changing the way information is represented in a document or file—for instance, changing binary representation to decimal or hexadecimal.

data corruption *n.* *See* corruption.

data declaration *n.* A statement in a program that specifies the characteristics of a variable. The requirements for data declarations vary among different programming languages but can include such values as variable name, data type, initial value, and size specification. *See also* array, data type, record[1], variable.

data definition language *n.* A language that defines all attributes and properties of a database, especially record layouts, field definitions, key fields, file locations, and storage strategy. *Acronym:* DDL.

data description language *n.* A language designed specifically for declaring data structures and files. *See also* data definition language.

data dictionary *n.* A database containing data about all the databases in a database system. Data dictionaries store all the various schema and file specifications and their locations. They also contain information about which programs use which data and which users are interested in which reports.

data directory *n.* *See* catalog, data dictionary.

data-driven attack *n.* A form of attack in which malicious code is hidden in a program or other innocuous data. When the data is executed, the virus or other destructive code is activated. A data-driven attack is typically used to bypass a firewall or other security measures.

data-driven processing *n.* A form of processing where the processor or program must wait for data to arrive before it can advance to the next step in a sequence. *Compare:* demand-driven processing.

data element *n.* A single unit of data. *Also called:* data item. *See also* data field.

data encapsulation *n.* A method of dealing with computers with Year 2000 problems that entailed modifying the input and output logic of a program, leaving the actual data unchanged as it was processed. The input logic was modified to reflect a date in the past that the computer could handle that paralleled the current calendar. When output was generated, the output logic changed the data to reflect the correct date.

data encryption *n.* *See* encryption.

data encryption key *n.* A sequence of secret information, such as a string of decimal numbers or binary digits, that is used to encrypt and decrypt data. *Acronym:* DEK. *See also* decryption, encryption, key (definition 3).

data encryption standard *n.* *See* DES.

data entry *n.* The process of writing new data to computer memory.

data/fax modem *n.* A modem that can handle both serial data and facsimile images to either send or receive transmissions.

data field *n.* A well-defined portion of a data record, such as a column in a database table.

data field masking *n.* The process of filtering or selecting part of a data field to control the way it is returned and displayed.

data file *n.* A file consisting of data in the form of text, numbers, or graphics, as distinct from a program file of commands and instructions. *Compare* program file.

D

dynamic allocation *n.* The allocation of memory during program execution according to current needs. Dynamic allocation almost always implies that dynamic deallocation is possible too, so data structures can be created and destroyed as required. *See also* allocate, deallocate. *Compare* static allocation.

dynamic binding *n.* Binding (converting symbolic addresses in the program to storage-related addresses) that occurs during program execution. The term often refers to object-oriented applications that determine, during run time, which software routines to call for particular data objects. *Also called:* late binding. *Compare* static binding.

dynamic caching *n.* A technique for storing recently used data in memory where cache size is based on how much memory is available rather than how much memory is assigned to the application currently running.

Dynamic Data Exchange *n. See* DDE.

dynamic dump *n.* A listing, either stored on disk or sent to a printer, of memory contents generated at the time of a break in the execution of a program—a useful tool for programmers interested in knowing what is happening at a certain point in the execution of a program.

Dynamic Host Configuration Protocol *n. See* DHCP.

dynamic HTML *n.* A technology designed to add richness, interactivity, and graphical interest to Web pages by providing those pages with the ability to change and update themselves dynamically—that is, in response to user actions, without the need for repeated downloads from a server. This is done by enabling the interaction of HTML, cascading style sheets (CSS), and JavaScript. Examples of dynamic HTML actions include moving graphics on the page and displaying information, such as menus or tables, in response to mouse movements or clicks. Interoperability is governed by the World Wide Web Consortium (W3C) Document Object Model (DOM) specification, a platform- and language-neutral interface to ensure that programs and scripts can dynamically access and update the content, structure, and style of documents. *Acronym:* DHTML.

dynamic keys *n.* An encryption technique in which messages are encrypted differently for each transmission based on different keys so that if a key is captured and decrypted, it would never be useful again. *See also* encryption, key (definition 3).

dynamic-link library *n.* A feature of the Microsoft Windows family of operating systems and OS/2 that allows executable routines to be stored separately as files with DLL extensions and to be loaded only when needed by a program. A dynamic-link library has several advantages. First, it does not consume any memory until it is used. Second, because a dynamic-link library is a separate file, a programmer can make corrections or improvements to only that module without affecting the operation of the calling program or any other dynamic-link library. Finally, a programmer can use the same dynamic-link library with other programs. *Acronym:* DLL.

dynamic memory allocation *n.* The allocation of memory to a process or program at run time. Dynamic memory is allocated from the system heap by the operating system upon request from the program.

dynamic page *n.* An HTML document that contains animated GIFs, Java applets, or ActiveX controls. *See also* ActiveX control, GIF, HTML, Java applet.

dynamic RAM *n.* A form of semiconductor random access memory (RAM). Dynamic RAM stores information in integrated circuits containing capacitors. Because capacitors lose their charge over time, dynamic RAM boards must include logic to refresh (recharge) the RAM chips continuously. While a dynamic RAM is being refreshed, it cannot be read by the processor; if the processor must read the RAM while it is being refreshed, one or more wait states occur. Despite being slower, dynamic RAM is more commonly used than RAM because its circuitry is simpler and because it can hold up to four times as much data. *Acronym:* DRAM. *See also* RAM. *Compare* static RAM.

dynamic random access memory *n. See* dynamic RAM.

dynamic relocation *n.* The relocation in memory of data or of the code of a currently running program by an internal system routine. Dynamic relocation helps a computer use memory efficiently.

dynamic routing *n.* Routing that adjusts automatically to the current conditions of a network. Dynamic routing typically uses one of several dynamic-routing protocols such as Routing Information Protocol (RIP) and Border Gateway Protocol (BGP). *Compare* static routing.

dynamic scheduling *n.* The management of concurrently running processes (programs), usually by the operating system.

insider attack *n.* An attack on a network or system carried out by an individual associated with the hacked system. Insider attacks are typically the work of current or former employees of a company or organization who have knowledge of passwords and network vulnerabilities. *Compare* intruder attack.

Ins key *n. See* Insert key.

install *vb.* To set in place and prepare for operation. Operating systems and application programs commonly include a disk-based installation, or setup, program that does most of the work of preparing the program to work with the computer, printer, and other devices. Often such a program can check for devices attached to the system, request the user to choose from sets of options, create a place for the program on the hard disk, and modify system startup files as necessary.

installable device driver *n.* A device driver that can be embedded within an operating system, usually in order to override an existing, less-functional service.

Installable File System Manager *n.* In Windows 9x and Windows 2000, the part of the file system architecture responsible for arbitrating access to the different file system components. *Acronym:* IFS.

installation program *n.* A program whose function is to install another program, either on a storage medium or in memory. An installation program, also called a setup program, might be used to guide a user through the often complex process of setting up an application for a particular combination of machine, printer, and monitor.

Installer *n.* A program, provided with the Apple Macintosh operating system, that allows the user to install system upgrades and make bootable (system) disks.

instance *n.* An object, in object-oriented programming, in relation to the class to which it belongs. For example, an object *myList* that belongs to a class *List* is an instance of the class *List*. *See also* class, instance variable, instantiate, object (definition 2).

instance variable *n.* A variable associated with an instance of a class (an object). If a class defines a certain variable, each instance of the class has its own copy of that variable. *See also* class, instance, object (definition 2), object-oriented programming.

instantiate *vb.* To create an instance of a class. *See also* class, instance, object (definition 2).

instant messaging *n.* A service that alerts users when friends or colleagues are on line and allows them to communicate with each other in real time through private online chat areas. With instant messaging, a user creates a list of other users with whom he or she wishes to communicate; when a user from his or her list is on line, the service alerts the user and enables immediate contact with the other user. While instant messaging has primarily been a proprietary service offered by Internet service providers such as AOL and MSN, businesses are starting to employ instant messaging to increase employee efficiency and make expertise more readily available to employees.

Institute of Electrical and Electronics Engineers *n. See* IEEE.

instruction *n.* An action statement in any computer language, most often in machine or assembly language. Most programs consist of two types of statements: declarations and instructions. *See also* declaration, statement.

instruction code *n. See* operation code.

instruction counter *n. See* instruction register.

instruction cycle *n.* The cycle in which a processor retrieves an instruction from memory, decodes it, and carries it out. The time required for an instruction cycle is the sum of the instruction (fetch) time and the execution (translate and execute) time and is measured by the number of clock ticks (pulses of a processor's internal timer) consumed.

instruction mix *n.* The assortment of types of instructions contained in a program, such as assignment instructions, mathematical instructions (floating-point or integer), control instructions, and indexing instructions. Knowledge of instruction mixes is important to designers of CPUs because it tells them which instructions should be shortened to yield the greatest speed, and to designers of benchmarks because it enables them to make the benchmarks relevant to real tasks.

instruction pointer *n. See* program counter.

instruction register *n.* A register in a central processing unit that holds the address of the next instruction to be executed.

instruction set *n.* The set of machine instructions that a processor recognizes and can execute. *See also* assembler, microcode.

object module *n.* In programming, the object-code (compiled) version of a source-code file that is usually a collection of routines and is ready to be linked with other object modules. *See also* linker, module (definition 1), object code.

object-oriented *adj.* Of, pertaining to, or being a system or language that supports the use of objects. *See also* object (definition 2).

object-oriented analysis *n.* A procedure that identifies the component objects and system requirements of a system or process that involves computers and describes how they interact to perform specific tasks. The reuse of existing solutions is an objective of this sort of analysis. Object-oriented analysis generally precedes object-oriented design or object-oriented programming when a new object-oriented computer system or new software is developed. *See also* object (definition 2), object-oriented design, object-oriented programming.

object-oriented database *n.* A flexible database that supports the use of abstract data types, objects, and classes and that can store a wide range of data, often including sound, video, and graphics, in addition to text and numbers. Some object-oriented databases allow data retrieval procedures and rules for processing data to be stored along with the data or in place of the data. This allows the data to be stored in areas other than in the physical database, which is often desirable when the data files are large, such as those for video files. *Acronym:* OODB. *See also* abstract data type, class, object (definition 2). *Compare* relational database.

object-oriented design *n.* A modular approach to creating a software product or computer system, in which the modules (objects) can be easily and affordably adapted to meet new needs. Object-oriented design generally comes after object-oriented analysis of the product or system and before any actual programming. *See also* object (definition 2), object-oriented analysis.

object-oriented graphics *n.* Computer graphics that are based on the use of graphics primitives, such as lines, curves, circles, and squares. Object-oriented graphics, used in applications such as computer-aided design and drawing and illustration programs, describe an image mathematically as a set of instructions for creating the objects in the image. This approach contrasts with the use of bitmapped graphics, in which a graphic is represented as a group of black-and-white or colored dots arranged in a certain pattern. Object-oriented graphics enable the user to manipulate objects as units. Because objects are described mathematically, object-oriented graphics can be layered, rotated, and magnified relatively easily. *Also called:* structured graphics. *See also* graphics primitive. *Compare* bitmapped graphics, paint program.

object-oriented interface *n.* A user interface in which elements of the system are represented by visible screen entities, such as icons, that are used to manipulate the system elements. Object-oriented display interfaces do not necessarily imply any relation to object-oriented programming. *See also* object-oriented graphics.

object-oriented operating system *n.* An operating system based on objects and designed in a way that facilitates software development by third parties, using an object-oriented design. *See also* object (definition 2), object-oriented design.

object-oriented programming *n.* A programming paradigm in which a program is viewed as a collection of discrete objects that are self-contained collections of data structures and routines that interact with other objects. *Acronym:* OOP. *See also* C++, object (definition 2), Objective-C.

Object Pascal *n.* An object-oriented derivative of Pascal. *See also* Pascal.

object-relational server *n.* A database server that supports object-oriented management of complex data types in a relational database. *See also* database server, relational database.

object request broker *n.* *See* ORB.

object wrapper *n.* In object-oriented applications, a means of encapsulating a set of services provided by a non-object-oriented application so that the encapsulated services can be treated as an object. *See also* object (definition 2).

oblique *adj.* Describing a style of text created by slanting a roman font to simulate italics when a true italic font isn't available on the computer or printer. *See also* font, italic, roman.

OC3 *n.* Short for optical carrier 3. One of several optical signal circuits used in the SONET high-speed fiberoptic data transmission system. OC3 carries a signal of 155.52 Mbps, the minimum transmission speed for which SONET and the European standard, SDH, are fully interoperable. *See also* SONET.

OCR *n.* *See* optical character recognition.

remote login is done primarily by rlogin and telnet. *See also* rlogin[1] (definition 1), telnet[1].

remote monitoring *n. See* RMON.

remote network monitoring *n. See* RMON.

Remote PC *n. See* remote system.

remote procedure call *n.* In programming, a call by one program to a second program on a remote system. The second program generally performs a task and returns the results of that task to the first program. *Acronym:* RPC.

remote system *n.* The computer or network that a remote user is accessing via a modem. *See also* remote access. *Compare* remote terminal.

remote terminal *n.* A terminal that is located at a site removed from the computer to which it is attached. Remote terminals rely on modems and telephone lines to communicate with the host computer. *See also* remote access. *Compare* remote system.

removable disk *n.* A disk that can be removed from a disk drive. Floppy disks are removable; hard disks usually are not. *Also called:* exchangeable disk.

REM statement *n.* Short for **rem**ark **statement**. A statement in the Basic programming language and the MS-DOS and OS/2 batch file languages that is used to add comments to a program or batch file. Any statement beginning with the word *REM* is ignored by the interpreter or compiler or the command processor. *See also* comment.

rename *n.* A command in most file transfer protocol (FTP) clients and in many other systems that allows the user to assign a new name to a file or files.

render *vb.* To produce a graphic image from a data file on an output device such as a video display or printer.

rendering *n.* The creation of an image containing geometric models, using color and shading to give the image a realistic look. Usually part of a geometric modeling package such as a CAD program, rendering uses mathematics to describe the location of a light source in relation to the object and to calculate the way in which the light would create highlights, shading, and variations in color. The degree of realism can range from opaque, shaded polygons to images approximating photographs in their complexity. *See also* ray tracing.

RenderMan Shading Language *n.* A C-like graphics and rendering language developed by Pixar.

repaginate *vb.* To recalculate the page breaks in a document.

Repeat *n.* A command in Microsoft Word that causes all information contained in either the last command dialog box or the last uninterrupted editing session to be repeated.

repeat counter *n.* A loop counter; typically, a register that holds a number representing how many times a repetitive process has been or is to be executed.

Repeat delay *n.* A delay for the amount of time that elapses before a character begins repeating when you hold down a key.

repeater *n.* A device used on communications circuits that decreases distortion by amplifying or regenerating a signal so that it can be transmitted onward in its original strength and form. On a network, a repeater connects two networks or two network segments at the physical layer of the ISO/OSI reference model and regenerates the signal.

repeating Ethernet *n. See* repeater.

repeat key *n.* On some keyboards, a key that must be held down at the same time as a character key to cause the character key's key code to be sent repeatedly. On most computer keyboards, however, a repeat key is not needed because a key automatically repeats if held down for longer than a brief delay. *Compare* typematic.

RepeatKeys *n.* A feature of Windows 9x and Windows NT that allows a user to adjust or disable the typematic keyboard feature so as to accommodate users with restricted mobility, who may activate typematic by accident because they have trouble lifting their fingers from the keys. *See also* typematic. *Compare* BounceKeys, FilterKeys, MouseKeys, ShowSounds, SoundSentry, StickyKeys, ToggleKeys.

repetitive strain injury *n.* An occupational disorder of the tendons, ligaments, and nerves caused by the cumulative effects of prolonged repetitious movements. Repetitive strain injuries are appearing with increasing frequency among office workers who spend long hours typing at computerized workstations that are not equipped with safeguards such as wrist supports. *Acronym:* RSI. *See also* carpal tunnel syndrome, ergonomic keyboard, wrist support.

replace *vb.* To put new data in the place of other data, usually after conducting a search for the data to be replaced. Text-based applications such as word processors typically include search-and-replace commands. In such

locate a particular item. A three-dimensional array treats data as if it were laid out in rows, columns, and layers. *See also* 3-D array, array, two-dimensional array.

three-dimensional model *n.* A computer simulation of a physical object in which length, width, and depth are real attributes—a model, with *x*-, *y*-, and *z*-axes, that can be rotated for viewing from different angles.

three-finger salute *n.* Slang term for a warm, or soft, boot, in which the Ctrl, Alt, and Delete keys are pressed simultaneously to restart a computer without first turning off the power. *Also called:* Vulcan death grip. *See also* warm boot.

three-nines availability *n.* The availability of a system 99.9% of the time. Three-nines availability equates to approximately 526 minutes of downtime in a standard 365-day year. *See also* high availability.

three-point editing *n.* In digital video editing, a feature that simplifies the process of placing new video within a sequence by assisting in calculating edit points. To make an edit, in and out points must be defined in the video clip to be added and in the sequence into which the clip is to be inserted. The user provides any three of these edit points and the editing software determines the fourth.

three-tier client/server *n.* A client/server architecture in which software systems are structured into three tiers or layers: the user interface layer, the business logic layer, and the database layer. Layers may have one or more components. For example, there can be one or more user interfaces in the top tier, each user interface may communicate with more than one application in the middle tier at the same time, and the applications in the middle tier may use more than one database at a time. Components in a tier may run on a computer that is separate from the other tiers, communicating with the other components over a network. *See also* client/server architecture. *Compare* two-tier client/server.

throbber *n.* An animated icon that moves while an application is completing a task, such as a browser loading a Web page. Throbbers serve to reassure the user that the application is still working on the task and has not frozen. Web browsers and some other applications come with a throbber icon. In some cases, the user can replace the original throbber with a customized icon of the user's choice.

throttle control *n.* A device that enables the user of a flight simulator or game to control simulated engine power. The throttle control is used along with a joystick (which controls the simulated ailerons and elevators) and possibly a rudder control.

throughput *n.* **1.** The data transfer rate of a network, measured as the number of bits per second transmitted. **2.** A measure of the data processing rate in a computer system.

throughput test *n. See* bandwidth test.

thumb *n. See* elevator.

thumbnail *n.* A miniature version of an image or electronic version of a page that is generally used to allow quick browsing through multiple images or pages. For example, Web pages often contain thumbnails of images (which can be loaded much more quickly by the Web browser than the full-size image). Many of these thumbnails can be clicked on to load the complete version of the image.

thumbwheel *n.* A wheel embedded in a case so that only a portion of the outside rim is revealed. When rolled with the thumb, the wheel can control an on-screen element such as a pointer or a cursor. Thumbwheels are used with three-dimensional joysticks and trackballs to control the depth aspect of the pointer or cursor. *See also* joystick, relative pointing device, trackball.

thunk[1] *n.* Code that enables 16-bit code to call 32-bit code, and vice versa. There are three different types of thunk: a flat thunk relies on a thunk compiler to allow 32-bit code to call a 16-bit DLL and 16-bit code to call a 32-bit DLL; a generic thunk enables a 16-bit application to load and call a 32-bit DLL; and a universal thunk allows 32-bit code to load and call a 16-bit DLL. All thunks are Windows-based, but the type of thunk used depends on the Windows version.

thunk[2] *vb.* To call 32-bit code from 16-bit code, or vice versa. Thunking involves, in large part, the translation to and from 16-bit segment offset memory addressing and 32-bit flat, or linear, memory addressing. *See also* address space, flat address space, segmented address space.

TIA *n.* Acronym for thanks in advance. On the Internet, a popular sign-off to a request of some sort. *Also called:* aTdHvAaNnKcSe.

tick *n.* **1.** A regular, rapidly recurring signal emitted by a clocking circuit; also, the interrupt generated by this signal. **2.** In some microcomputer systems, notably Macintosh, one sixtieth of a second, the basic time unit used by the internal clock that is accessible by programs.